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# **FIBER OPTIC SCINTILLATOR WITH OPTICAL GAIN FOR A COMPUTED TOMOGRAPHY SYSTEM AND METHOD OF MANUFACTURING SAME**

## **Abstract of Disclosure**

The present invention provides a detector for a CT system. The detector includes a scintillator with built-in gain for receiving and converting high frequency electromagnetic energy to light. Each scintillator is formed of a scintillating material and an optically stimulated material. The components may be intermixed with one another to form a single composite structure or formed into layers to form a single layered structure. The scintillator may be incorporated into the detector array of any CT system including medical diagnostic systems and package/baggage inspection systems.

## Figures